

**VACUUM LABORATORY, PORTION OF THE
NASA LUNAR RECEIVING LABORATORY**

GEOLOGICAL SAMPLES RETURNED FROM THE MOON will be examined initially in this special vacuum laboratory located in NASA's Lunar Receiving Laboratory at Houston. The facility was designed and fabricated by Y-12. The containers for the samples are cleaned, sterilized and dried in the glove box in the left foreground, then opened in the glove box (center photo) and the samples removed. At far right is the ultra-high vacuum chamber in which high integrity samples will be removed from vacuum canisters. A tool storage carousel is at left rear, and the sample storage carousel at right rear.

Y-12 Designs High Vacuum Equipment To Be Used To Handle Moon Samples

Y-12 has designed, developed and fabricated high vacuum equipment to be used in the remote handling and processing of specimens of lunar material to be returned from the moon by Apollo astronauts.

The equipment, consisting of vacuum chambers equipped with mechanical handling devices and a vacuum glove box, provides a biological barrier. Presently, it is being installed in the National Aeronautics and Space Administration's Lunar Receiving Laboratory at the Manned Spacecraft Center in Houston.

Y-12 was requested to perform the work because of the plant's long experience in handling materials that require a high degree of containment.

The lunar specimens, transported in two vacuum-tight, box-shaped, aluminum containers designed and fabricated in Y-12, will be taken to the vacuum laboratory for initial examination and cataloging.

Upon return from the lunar surface the exterior of each container will be sterilized and decontaminated in glove boxes before being placed in a vacuum glove box which has a pressure of 10^{-6} torr—a pressure equivalent

to about one billionth that of the earth's atmosphere. A container will be punctured and the contained gases let into an instrument where they can be analyzed.

After the degassing operation, a container will be opened and the samples removed from plastic bags. Each sample is to be weighed, photographed, examined by microscope and catalogued for future identification.

This initial processing will be followed by radiation counting and other analytical and metallographic examinations performed elsewhere in the Lunar Receiving Laboratory complex. Eventually,

many of these samples will be sent to more than 50 universities and laboratories throughout the world for additional study.

One of the more challenging problems in the design and fabrication of the vacuum laboratory has been the development of an ultra high vacuum chamber, with a mechanical manipulator, to operate at a pressure of approximately 5×10^{-11} torr—an atmospheric density approaching that of the moon. This special chamber will be used for the examination of high integrity samples that were sealed in ultra high vacuum canisters on the moon to preserve the specimens in a lunar-type environment.

SAFETY SCOREBOARD

The Y-12 Plant Has
Operated
**51 Days Or
1,479,000 Man-Hours**
(Unofficial Estimate)
Through May 12
**Without a Disabling
Injury**
**Safety At Home
At Work, At Play**

Playhouse To Present Two One-Act Plays

Two one-act plays will be presented at the Oak Ridge Playhouse Friday, Saturday and Sunday, May 17, 18 and 19 under the auspices of the Playhouse Studio Theatre. Peter Dittner is the director of "Zoo Story" by Edward Albee and "Endgame" by Samuel Beckett.

Tickets may be picked up free of charge by Playhouse members at the box office.

UCC Annual Meeting Is Moderately Optimistic About Outlook For '68

**Stockholders Informed That Sales Were Up
Two Per Cent For First Quarter Of New Year**

Sales of Union Carbide Corporation and its consolidated subsidiaries throughout the world were approximately \$628 million in the first quarter of 1968, up two per cent over a year ago, stockholders were told at the annual meeting held recently at Hunter College. Board Chairman Birny Mason Jr. presided at the meeting. It was reported that preliminary figures place worldwide earnings at about 69 cents a share, about five per cent below the 73 cents earned in the comparable period last year, and moderate optimism was expressed regarding the outlook for the full year.

In reviewing operations, President Kenneth Rush pointed out that first-quarter earnings were below a year ago because costs were substantially higher in this year's quarter — including expenses involved in starting up new facilities — and sales have not yet risen sufficiently to offset these expenditures. Rush cited as an example the corporation's new facilities at Taft, Louisiana, where a large complex of highly sophisticated new petrochemicals units is being brought on-stream. Preliminary operating expenses, abnormal production costs, and depreciation charges at this plant alone totaled about \$40 million in 1967, and there was little salable production from the plant. On an after-tax basis, the added cost was equivalent to a reduction in earnings last year of 34 cents a share.

In regard to the year 1968 as a whole, Rush indicated that the general level of business activity would continue to be a key factor in Union Carbide's performance. However, he said, "We look for gradual but continuing improvement in both sales and profit margins, and thus in earnings, as the years go on."

Profitable Business Opportunities Cited

Four businesses that are expected this year to generate pre-tax earnings in excess of \$25 million in the United States alone — up substantially from the level of only a few years ago — were mentioned by Rush as examples of opportunities developed through the corporation's long-range investments in new plant construction, research, market development, and raw materials.

A fundamental research program on gas separation, begun over 10 years ago, resulted in the development of Molecular Sieves. These unique products, which can trap and hold individual molecules of gas or liquid in the small pores in their surface structure, are finding many applications today. For example, they are used to increase the production of gasoline from crude oil by 80 per cent of the refineries in the United States employing the catalytic cracking process.

A second example involves the application of market development and technology to an older business—the production and sale of graphite electrodes to the steel industry for use in its electric arc furnaces. In an effort to increase the productivity of these furnaces, Union Carbide established a research program to develop superior-quality electrodes. This highly successful program made possible much higher power levels than had previously been thought practical. As a result, the electric furnace has become so economical that 12 per cent of the steel now produced in this country is made by the electric arc process, and the percentage continues to increase.

'Glad' Products Take Share of Plastic Wrapping Market

About three and a half years ago, Union Carbide established its Glad line of plastic household products. Here the corporation combined its polyethylene and film production technology and its capabilities in consumer product marketing and distribution. It is now one of the leaders in this business, with about a 30 per cent share of the household plastic wrapping materials market.

Development of oil and gas properties was the fourth example mentioned by Rush as a promising business opportunity for Union Carbide. Since hydrocarbons derived from oil and gas are essential to its chemicals and plastics operations, the corporation has been endeavoring to improve its raw material position. In the past, most of these materials have been purchased, but in recent years Union Carbide has been participating to a greater degree in developing its own sources of supply. It was revealed that exploration of the offshore Louisiana coastal area, which the corporation has been conducting in conjunction with several other companies, has proved outstandingly successful. Oil production in a

Continued on Page 4



Mrs. Jerry King

KING—SUMMERS

The East Village (Oak Ridge) Church of Christ was the scene of the Sunday, May 5, wedding of Miss Susan Lynn Summers to Mr. Jerry King. Willard Reel officiated at the 2 p.m. rites.

The bride is the daughter of Mr. and Mrs. James E. Summers Jr., 117 Columbia Drive, Oak Ridge; and the groom is the son of Mr. and Mrs. E. C. Cranmore, Route 3, Oliver Springs. (Mr. Summers is in Y-12's Research Services.)

For her wedding the bride chose a traditional length gown highlighted with alencon lace, styled with an Empire A-line. There were pearled lace motifs on bodice, skirt and the wattleau chapel length train. Her queen's crown of lace was embroidered with pearls and held the bouffant veil of English silk illusion. Her only jewelry was a strand of pearls, a gift of the groom.

Mr. Summers gave his daughter in marriage.

The bride's only attendant was her sister Miss Elizabeth Joy Summers.

Roger A. King was best man, and ushers were David Wray, and William Robert Bennett, both of Oak Ridge.

The church was decorated with baskets of white gladioli and greenery backed with graduated candelabras holding white tapers.

A reception honored the couple at the church immediately following the ceremony. The bride's aunt, Mrs. Bill Bennett, along with other church women assisted at the reception.

The bride is a graduate of Oak Ridge High School, and the groom is a graduate of Clinton High School. He is presently with the U. S. Navy at Key West, Florida, where the couple will reside.

SOME ADVANTAGES

The huge national debt, at least, has one happy aspect. It will eliminate one indulgence from future generations . . . ancestor worship.

The Bulletin

Published Weekly For The
Y-12 Employees Of
UNION CARBIDE
CORPORATION



NUCLEAR DIVISION

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Appalachian
Industrial
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American Association Industrial Editors

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Mrs. Larry V. Moore



Mrs. John William Storey

STOREY—WEST

The marriage of Miss Linda G. West and Mr. John William Storey was solemnized Friday, April 19, at 7 p.m. at the Bells Camp Ground Methodist Church, Powell, Tennessee. The Reverends J. W. Satterfield and Kenneth Perkins officiated.

The bride is the daughter of Mr. and Mrs. John K. West, Route 20, Greenbrook Drive, Knoxville; and the groom is the son of Mr. and Mrs. James Storey, 2638 Wood Smith Road, Knoxville. (The bride's father is in Y-12's Alpha Five Processing.)

Nuptial music was provided by

MOORE—RULE

Mr. Larry Vance Moore and Miss Vickie Anne Rule were united in marriage in an evening ceremony, Saturday, April 6. The wedding took place at the Broadway Baptist Church, Maryville, and the rites were performed by the Reverend Stuart Rule, the bride's uncle.

The bride is the daughter of Mr. and Mrs. Roger D. Rule, Alcoa; and the groom is the son of Mr. and Mrs. Emmett L. Moore Sr., 211 North Purdue Avenue, Oak Ridge. Moore is in Y-12's Utilities Administration.

Given in marriage by her father, the bride wore a white silk organza gown fashioned with a scoop neckline and detachable full bow chapel train. Peau de soie lace reembroidered with pearls and crystals circled the empire waistline and long tapered sleeves. An organza rose cluster with lace petals held the bouffant veil of English silk illusion. She carried a bouquet of white orchids and lilies of the valley over a lace-covered white Bible, a gift of her friends at church.

Mrs. Robert Parsons, Richlands, North Carolina, served as matron of honor. Bridesmaids were Misses Patricia Moore, sister of the groom; and Mrs. Ken Hastings, both of Oak Ridge; Mrs. Stephen Neas, Greenville; and Janet Trendenick, Norris.

The groom's father served as his son's best man. Ushers were Emmett L. Moore Jr., Gurnee, Illinois; Rodney W. Moore, Warner Robbins, Georgia; and David Moore, Oak Ridge, all brothers of the groom; Jack Wolfe, Huntsville, Alabama; and Leroy Hylton, Clinton.

A reception honored the couple at the Reception Hall at Church immediately after the ceremony.

The bride graduated from East Tennessee State University with a BS degree in nursing. The groom also graduated from ETSU with a BS degree in social welfare. He is presently employed at J. C. Penney's, Oak Ridge.

After a wedding trip, the couple is at home at 128 West Tennessee Avenue, Oak Ridge.

Mrs. David Burkey; and soloists Mrs. J. W. Griffin and Mrs. Ben Long.

Given in marriage by her father, the bride wore a princess style gown of traditional white satin, with chantilly lace inserted in the sweeping chapel length train, with a bodice of chantilly lace and long pointed sleeves. Tiers of lace reembroidered with seed pearls fell from the illusion veil. She carried a colonial bouquet of white carnations with white streamers centered with a white orchid.

Mrs. Richard Atkins, Powell, was matron of honor; and the bride's sister, Sharon West, was maid of honor. Miss Michelle West, cousin of the bride, was flower girl.

The groom's attendants were Billy Gillespie, best man, Knoxville, brother-in-law of the groom; and ushers Jerry J. West, uncle of the bride, and James E. Johnson, Knoxville.

A reception honored the couple at Fellowship Hall of Beaver Creek Presbyterian Church.

The bride is a graduate of Powell High School. She is a former organist at Bells Camp Ground Methodist Church and teaches music. She is presently employed by C. M. McClung in the adjustment department. The groom is a graduate of Karns High School, and is presently serving in the United States Coast Guard, aboard the USCGC Cape Starr, stationed in Atlantic City, New Jersey.



DENNIE ROBERTS, LEFT, is congratulated by John S. Reece, Chemical Services superintendent, on her early retirement recently Mrs. Roberts came to Y-12 more than 24 years ago . . . back in April of 1944. She retires to her 117 Parker Road, Oak Ridge, home.



ANOTHER EARLY RETIREMENT was noted in Y-12 recently as Mary Pickens, Process Maintenance, elected an early retirement. She is presented her 11-year plus "veteran's" plaque by Dan Stroud, above. Mrs. Pickens lives at 101 Ulena Lane. Her daughter, Mrs. Stephen Babb, also works in Y-12.



BENJAMIN I. SCOTT, RIGHT, left Dispatching April 30 after 23 and a half years service with Union Carbide Corporation. Bill Butturini, Dispatching Superintendent . . . now over Scheduled Production, congratulates Scott on his retirement.

VERSATILE METAL

Silver, one of the most versatile of metals, can be used for more than just a pretty pin. It has many uses in medicine—for anti-septics, astringents and caustics and it is ideal for surgical wire

and plates. Silver also sterilizes water, fills teeth, backs mirrors, acts as a catalyst in the manufacture of fertilizer and destroys warts.

Security is your responsibility.

Arnold Son Named Clinton Student Council Leader



Eddie Arnold

Eddie Arnold, son of Mr. and Mrs. Polie E. Arnold, 108 Timothy Avenue, Clinton, was recently elected head of the Student Council at Clinton High School. Eddie is a junior at CHS.

He is a member of the National Honor Society, Science Club, and Pep Band. He has been chosen as drum major of next year's marching band.

Eddie is a member of the Memorial Methodist Church, where he serves as vice president of the Methodist Youth Fellowship. He is a sub district president of the area MYF. He is active in the Clinton Teen Board, and has been a member of the student council all three years of the high school life.

The 17-year-old Arnold son plans to attend the University of Tennessee with an eye on Johns Hopkins Medical School later on.

The proud father is in Y-12's Material Procurement.

Security is based largely upon the loyalty each employee has for his country.

April Skeet Top Shooters Named

Winners in April Skeet firing were D. Fry, ORNL, with a 49.629 handicap score; F. S. Patton, Y-12, with a 49.317; and Fred Welfare, ORNL, 49.156.

A total of 14 shooters participated in the April competition. The fast and furious heat saw all three winners having a 49/50 scratch score.

Each monthly tournament is a separate contest consisting of two skeet rounds (50 targets). Scoring is on a handicap basis so new shooters have a good chance to beat the old timers.

May's competition was set for last Sunday, May 12.

April Skeet Scores:

Firer	H'Cap Score
R. A. Allstun, Y-12	46.534
J. Allison, K-25	47.120
C. Asmanes, Y-12	47.531
K. Bahler, Y-12	48.298
L. M. Bray, Y-12	45.830
J. M. Case, Y-12	49.035
B. Etheridge, Y-12	46.480
D. Fry, ORNL	49.629
R. McHenry, ORNL	47.729
F. S. Patton, Y-12	49.317
C. Theobald, K-25	46.960
T. Webber, Y-12	48.313
F. Welfare, ORNL	49.156
M. Wiest, Y-12	48.842

Horseshoe Leagues Are Paged For Summer

You cowboys that want to toss horseshoes in the summer Horseshoe League had better get your name in the corral.

The Recreation Department of ORNL and Y-12 are getting together again this year to set up the League. The play operates in two-men teams. Just call Recreation, 3-7109, and they'll fix you up.

Did You Lose An Iron At Kingston?

Some golfer at the Kingston April 27 tournament sure was in a hurry to get out of the rain.

He ran off and left an iron (a Wilson Sam Snead) and another kind golfer turned it in.

Check your golf bag and see if you're missing an iron. You can pick it up in the Recreation Office, Building 9704-2.



CLAXTON GRAMMAR SCHOOL CHEERLEADERS include many a Y-12er's off-spring or kin. Above in the first row are Sharon Trowbridge (whose father is in ORNL); Jenny Turner (K-25); Sandra Thompson (Y-12's Development); and Terry Kendrick (sister to Judy Winslett, Development). In the second row are Peggy Kendrick (Y-12's Accounting and Budget); Kathy Chandler (Y-12's Maintenance); Caroline Bowers (AEC); Kitty Parteka (whose father is an ex-Y-12er); Jana Adkins (Y-12's Accounting and Budget); Charlotte Hughes (mother, Accounting and Budget); Lynn Herring, Susie Hughes (mother, Accounting and Budget); Janet Bryson, and Kim Thomas (father, Y-12's Utilities).

Recreation



Saturday, May 18

GOLF TOURNAMENT: Beginning 7 a.m. Gatlinburg Golf and Country Club, Gatlinburg, Tennessee. (Golfers: Please show 20 minutes before scheduled tee-off times.)

Monday, May 20

SOFTBALL: Beginning 6:15 p.m. Pinewood Park. Cardinals vs. J-Birds; K-25 Colts vs. UCC All Stars; Big Shops vs. White Sox.

PHYSICAL FITNESS: (For Women) 7:30 p.m. Oak Ridge High School Gym.

Tuesday, May 21

SOFTBALL: Beginning 6:15 p.m. Pinewood Park. J-Birds vs. Eagles; White Sox vs. Pirates; Big Shops vs. Colts.

PHYSICAL FITNESS: (For Men) 7:30 p.m. Oak Ridge High School Gym.

Thursday, May 23

ARCHERY LEAGUE: 5:15, 6:15, 7:15 p.m. Oak Ridge Sportsman's Association Range.

SOFTBALL: Beginning 6:15 p.m. Pinewood Park. Gas House Gang vs. UCC All Stars; Bat Boys vs. Beta 2; Braves vs. Cardinals.



Ride wanted from Claxton area, to North Portal, straight day. Sharon Clapp, plant phone 3-7133.

Rider wanted from Rocky Hill, Bearden, or West Hills section, Knoxville, to any portal, straight day. Maxine Garrison, plant phone 3-5783, home phone Knoxville 588-5916.

Will join car pool from Fountain City area, to Central or West Portals, straight day. Cliff Williams, plant phone 3-7235, home phone Knoxville 689-2634.

Riders wanted from North Hills, Fountain City, Knoxville, to any portal, straight day. F. E. Clevenger, plant phone 3-5095, home phone Knoxville 522-7393.

Gatlinburg Golfers Urged To Show Early Saturday

Attention Gatlinburg golfers ... please arrive 20 minutes before your posted tee-off time. It's possible to keep the traffic flowing rather smoothly if all the horses are at the gate at the start.

Also remember you are guests at the Gatlinburg course ... and the usual courtesy is expected of you.

June's tournament, set for the 22nd, will be held at Wallace Hills, Maryville.

Israeli Art Exhibit Now At O.R. Art Center

The Oak Ridge Chapter of Hadassah with the cooperation of the Oak Ridge Community Art Center is sponsoring an exhibit of Israeli Art in honor of the country's 20th anniversary of statehood.

The exhibit, at the Art Center on Badger Avenue, will continue through the month of May ... Monday through Friday 9:30 a.m. to 12:30 p.m. Saturdays from 10:30 a.m. to 12:30 p.m. and on Sunday 3 p.m. to 6 p.m.

Memorial Day Holiday Moved To Friday, May 31

Friday, May 31, will be observed as a holiday this year, in lieu of Memorial Day which falls on Thursday.

Taking the day after Memorial Day as an official holiday will afford Y-12ers a long weekend to paint their screens, mow the lawn, fish or just loaf.

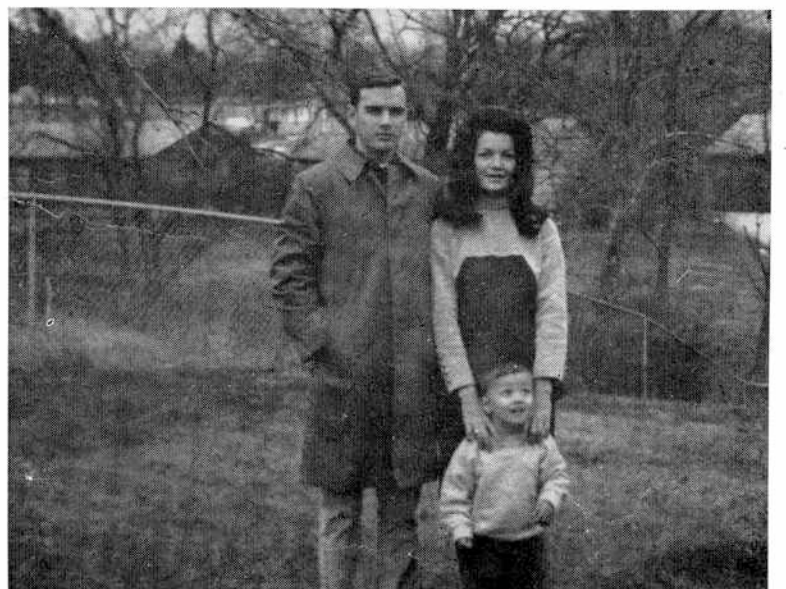
Y-12ers are currently enjoying nine holidays a year ... New Year's Day, George Washington's birthday, Good Friday, Memorial Day, Independence Day, Labor Day, Thanksgiving Day (and a new one this year the day after Thanksgiving), and Christmas.

COMMUNICATIONS LINK

"No wonder there's often a breakdown in human communication. Even though there are only two people talking or writing to each other, there are actually eight personalities present: There are you and I; there is who I think I am, and who you think you are; there is who I think you think you are, and who you think I think I think I am." Anonymous.



LOUISE WARMLEY, MAINTENANCE, decorates her home with six bowling trophies these days ... three of which are shown above. In addition to the top mixed doubles trophy she took in the Y-12 tournament, she also won three in the Roane County bowling competition ... for an all event scratch score of 544 ... for a 650 handicap series in all events ... and as team champions in Roane County. In addition to these honors, she won a state trophy in Chattanooga in March, rolling a 547 scratch series to lead her team, as they took the first place in team events. In addition, she won a trophy as a member of the first placed Friday morning League at Midway.



TOMMY AND JUDY RHEA recently visited his parents, Mr. and Mrs. O. J. Rhea, 201 East Drive. It was Judy and Little Tom's first visit to Tennessee ... as the Rhea son has been in the Air Force for the past three years. Tommy's proud father, and Little Tom's grandfather is in Y-12's General Machine Shop.

Ball, Paducah's Industrial Relations Head, Succeeds New York-Bound Dykes

John M. Ball, Industrial Relations Superintendent at Paducah's Gaseous Diffusion Plant, has been promoted to manager of labor relations for the Nuclear Division, Union Carbide Corporation. His offices will be in Oak Ridge.

Ball succeeds George H. Dykes, who has been associated with Union Carbide labor relations work in Oak Ridge since 1944. Dykes has been appointed assistant manager - labor relations in the Chemicals and Plastics Operations Division, Union Carbide. He will be located in New York.

Ball joined Union Carbide in 1951, working in the field of labor relations at Oak Ridge Gaseous Diffusion Plant. He was named labor relations supervisor at Paducah two years later and was appointed Industrial Relations superintendent in 1965.

A native of New York City, Ball attended Rutgers University and received his LLB from Emory University. During World War II, he spent five years in the Chemical Warfare Service. He spent five years with the National Labor Relations Board prior to joining Union Carbide.

Ball is a past-president of the Paducah Area Industrial Relations Association and chairman of the Education Committee, Paducah Chamber of Commerce. He is also a member of the American Management Association, Georgia Bar Association, and the Paducah Rotary Club.

He is married to the former Lou Lyon of Abingdon, Virginia. They have four children: Terry, 18; John, 17; Lucinda, 14; and Christopher, 11.

George Dykes' career in Oak Ridge spans 24 years. A year after being appointed to the Labor Relations Department at ORGDP, he was appointed labor relations supervisor there. He was named industrial relations supervisor at K-25 in 1951 and was appointed assistant general superintendent of Industrial Relations for the Nuclear Division in 1957. He was named assistant industrial relations manager in 1962.

Always active in civic affairs, Dykes was secretary of the Board of Trustees of the Oak Ridge Hospital, director of the Anderson County Tuberculosis Association, a member and chairman of the Tax Equalization Board of Anderson County. He served for several years as chairman of the Scientific Advisory Committee of the Selective Service System, State of Tennessee.

He was elected president of the Tennessee Elks Association in 1957 and is a past-exalted ruler and honorary life member of Oak Ridge Lodge 1684, Benevolent and Protective Order of Elks.

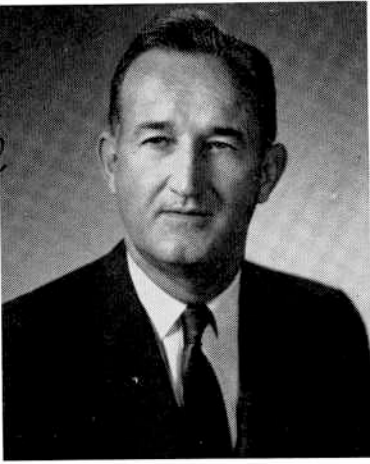
Dykes is a member of the In-

Little, Choat Are Attending Meeting

J. C. Little, Engineering Division, and E. E. Choat, Environmental Control Engineering, are attending the American Association for Contamination Control's 7th Annual Meeting this week in Chicago.

Little, along with D. W. Stanfill, Goddard Space Flight Center, will deliver a paper on "High Bay Laminar Flow Clean Rooms." He will also participate in a three-hour panel discussion on "Contamination Control: The Architect, the Engineer and the User."

Choat will present a paper authored by J. R. DeMonbrun, who is unable to attend.



John M. Ball



George H. Dykes

dustrial Relations Committee of the Tennessee Manufacturers Association and was a member of the board of directors of the Oak Ridge Country Club.

A native of Campbell County, Tennessee, Dykes is married to the former Ernestine Estes, of Detroit, Michigan. They have four children: Mrs. Patricia Gates, Powell; George Jr., Nashville; Thomas, Kingsport; and Donna, a senior at Oak Ridge High School.



J. PAUL SNODGRASS, RECEIVING, right, receives his mantle clock and certificate welcoming him into the Union Carbide "Old-Timers" outfit. It was 25 years ago last week that Snodgrass hired in. He becomes the second oldest "old-timer" in the plant, with all of his service in Y-12. In other words, there are others older than he in company service, but they served in other UCC divisions before coming here. He is congratulated by E. A. Pulhar, Materials and Services Superintendent, himself an "Old-Timer."

Annual Meeting

Continued from Page 1
field recently discovered there, which is among the largest in these coastal waters, was started in March of this year, and further important discoveries are being made. This venture is expected to be earning several million dollars for Union Carbide in 1969.

In addition, Rush referred to work being done in many exciting new areas of research, such as ocean engineering, inorganic fibers, microelectronics, and radio-pharmaceuticals. He also spoke of Union Carbide's development of a polyethylene-insulated cable for underground electrical distribution and a precision planting system for use in agriculture. It was mentioned that expenditures for research and development last year were 11 per cent above 1966.

New Corporate Movie

Following the president's review of operations, Mason introduced the premiere showing of a new corporate motion picture, called "The Discoverers." The 20-minute movie, produced by Peckham Productions, reflects the unusually wide spectrum of technology employed by Union Carbide, and highlights some of the scientific frontiers that the corporation is exploring. The multinational aspects of Union Carbide's operations were illustrated by scenes photographed near Brescia, Italy, and at Hyderabad and Trombay in India. It is planned to make prints of the film available for showings to employees, schools, business and civic groups, and others.

DEFECTIVE APPLIANCES

Defective, worn-out electrical appliances cause almost 2,000 fires in homes each month. Do you keep your appliances in good condition, asks the National Fire Protection Association?

It is incumbent upon each employee to prevent inspection of or access to classified matter by unauthorized personnel.



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NUCLEAR DIVISION
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WALTER CRONKITE, left, principal reporter of "The 21st Century," discusses problems of the computer with Peter Poor, associate producer, and Dr. John McCarthy, computer technologist. The second part of "The Computer Revolution" will be telecast Sunday, May 19, at 6 p.m., EDT, over Channel 10, WBIR-TV. The program is broadcast in color over CBS Television Network, sponsored in the public interest by Union Carbide Corporation.

'Computer Revolution' On 21st Century Sunday Poses Interesting Problems

Will the prospect of "artificial intelligence" in the computer convert each of us to a magnetic bit in a computer tape in the twenty-first century? This question will be discussed in the second part of "The Computer Revolution" episode of "The 21st Century," to be telecast Sunday, May 19, at 6 p.m., EDT, in color on the CBS Television Network. The program is carried locally by WBIR-TV, Channel 10. CBS News Correspondent Walter Cronkite is principal reporter for the series, sponsored in the public interest by Union Carbide Corporation.

The computer itself provides escape from the uniformity that might result from its misuse, according to Dr. John McCarthy, leading computer technologist of Stanford University, California. "In particular," he adds, "if we can program a computer to perform a design process, then it becomes possible to do a million different design processes for a million different people."

Another comment on the future of the computer has been made by Fred Warshofsky, science editor for "The 21st Century" and writer of "The Computer Revolution."

"Without computers there won't be a twenty-first century,—at least not in the form we now envision it," Warshofsky has said, citing the complexity of problems which would exceed the capabilities of the most skilled mathematicians and engineers. Among these problems is that of the space program.

The telecast also shows computers in use in law enforcement, choreography, musical composition, automobile and building design, and in a library.

"The 21st Century" is produced by Isaac Kleinerman; Burton Benjamin is executive producer.

Ladies Night Set Tomorrow For ASME

The East Tennessee Section of the American Society of Mechanical Engineers will hold its Spring annual meeting tomorrow, Thursday, May 16, in the Main Ballroom of the Alexander Motor Inn, Oak Ridge. A ladies-night, the meeting will begin with a social hour at 7 p.m., buffet at 7:45 and the program at 8:30.

Stewart Rockwell, deputy assistant secretary of state for Near Eastern and South Asian Affairs will be the guest speaker. His subject will be "U. S. Foreign Policy in the Mid-East." Rockwell is a member of the five-man team from the U. S. Department of State, headed by Under Secretary of State Katzenbach, which will be at the conference on U. S. Foreign Policy May 17 at the University of Tennessee.

Reservations for tomorrow's meeting are required, and are made through Don Gray, Oak Ridge telephone 483-6629.

Choset Students Plan Gala Concert

A youth concert in celebration of World Child's Day for Youth Aliyah will be presented by students of Malka Choset Sunday, May 19, at 7 p.m. at the Beth El Synagogue.

The students will perform on the piano, violin, cello, and oboe such works as J. S. Bach, Mozart, Stravinsky, Saint-Saens, Lavry, Scriabin and others.